EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	1128	wallach.in. or ramakrishnan.in. or "shmushkovich.in"	US-PGPUB; USPAT	OR	OFF	2007/03/22 22:05
L2	91	l1 and (nik or (NF-kappa B-inducing kinase))	US-PGPUB; USPAT	OR	OFF	2007/03/22 22:08
L3	200	IL-2 near6 (nik or (NF-kappa B-inducing kinase))	US-PGPUB; USPAT	OR	OFF	2007/03/22 22:08
L4	2	l2 and l3	US-PGPUB; USPAT	OR	OFF	2007/03/22 22:08

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Scand J Rheumatol Suppl. 1988;76:265-78. Review.
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Schweiz Med Wochenschr. 1985 Apr 20;115(16):534-50. Review. German.
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Items 81 - 95 of 95 Previous Page 5 of 5

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Items 1 - 5 of 5 One page.

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NF-kappaB-inducing kinase is involved in the activation of the CD28 responsive element through phosphorylation of c-Rel and regulation of its transactivating activity.
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EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	1	"5854003".pn.	US-PGPUB; USPAT	OR	OFF	2007/03/22 20:32
L2	3	(NF-kappa B-inducing kinase or NIK) near8 (IL-2 or IL2)	US-PGPUB; USPAT	ADJ	OFF	2007/03/22 20:46

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L2   ANSWER 1 OF 4     MEDLINE on STN                    DUPLICATE 1
AN   2006187607     MEDLINE
DN   PubMed ID: 16585559
TI   NF-kappaB-inducing kinase is involved in the activation of the
CD28
     responsive element through phosphorylation of c-Rel and
regulation of its
     transactivating activity.
AU   Sanchez-Valdepenas Carmen; Martin Angel G; Ramakrishnan
Parameswaran;
     Wallach David; Fresno Manuel
CS   Centro de Biologia Molecular, Consejo Superior de Investigaciones
     Cientificas, Universidad Autonoma de Madrid, Madrid, Spain.
SO   Journal of immunology (Baltimore, Md. : 1950), (2006 Apr 15)
Vol. 176, No.
     8, pp. 4666-74.
     Journal code: 2985117R. ISSN: 0022-1767.
CY   United States
DT   Journal; Article; (JOURNAL ARTICLE)
     (RESEARCH SUPPORT, NON-U.S. GOV'T)
LA   English
FS   Abridged Index Medicus Journals; Priority Journals
EM   200605
ED   Entered STN: 5 Apr 2006
     Last Updated on STN: 17 May 2006
     Entered Medline: 16 May 2006
AB   Previous evidence suggested that NF-kappaB-inducing kinase (NIK)
     might regulate IL-2 synthesis.  However, the molecular
     mechanism is not understood.  In this study, we show that NIK is
     involved in CD3 plus CD28 activation of IL-2
     transcription.  Splenic T cells from aly/aly mice (that have a
defective
     NIK protein) have a severe impairment in IL-2
     and GM-CSF but not TNF secretion in response to CD3/CD28.  This
effect
     takes place at the transcriptional level as overexpression of
alyNIK
     inhibits IL-2 promoter transcription.  NIK activates the CD28
     responsive element (CD28RE) of the IL-2 promoter and
     strongly synergizes with c-Rel in this activity.  We found that
NIK
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interacts with the N-terminal domain of c-Rel, mapping this interaction to aa 771-947 of NIK. Moreover, NIK phosphorylates the c-Rel C-terminal transactivation domain (TAD) and induces Gal4-c-Rel-transactivating activity. Anti-CD28 activated Gal4-c-Rel transactivation activity, and this effect was inhibited by a NIK-defective mutant. Deletion studies mapped the region of c-Rel responsive to NIK in aa 456-540. Mutation of several serines, including Ser471, in the TAD of c-Rel abrogated the NIK-enhancing activity of its transactivating activity. Interestingly, a Jurkat mutant cell line that expresses one of the mutations of c-Rel (Ser471Asn) has a severe defect in IL-2 and CD28RE-dependent transcription in response to CD3/CD28 or to NIK. Our results support that NIK may be controlling CD28RE-dependent transcription and T cell activation by modulating c-Rel phosphorylation of the TAD. This leads to more efficient transactivation of genes which are dependent on CD28RE sites where c-Rel binds such as the IL-2 promoter.

L2 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2003:837297 CAPLUS
DN 139:312400
TI Modulation of NIK with IL-2 common γ chain and therapeutic uses thereof
IN Wallach, David; Ramakrishnan, Parameswaran; Shmushkovich, Taisia
PA Yeda Research and Development Co.Ltd, Israel
SO PCT Int. Appl., 98 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2003087380	A1	20031023	WO 2003-IL317	20030415

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,

GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,
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RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
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FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

CA 2482387	A1	20031023	CA 2003-2482387	20030415
AU 2003226607	A1	20031027	AU 2003-226607	20030415
EP 1499729	A1	20050126	EP 2003-746399	20030415
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JP 2005530491	T	20051013	JP 2003-584319	20030415
US 2005272633	A1	20051208	US 2005-511314	20050517
PRAI IL 2002-149217	A	20020418		
IL 2002-152183	A	20021008		
WO 2003-IL317	W	20030415		

AB This invention relates to the use of NIK and related mols. for the modulation of signal activities controlled by cytokines, and some new such mols. In addition the invention relates to the use of a DNA encoding NIK, or its antisense , NIK specific antibodies, a small mol. obtainable by screening products of combinatorial chemical in a luciferase system, for modulating the interaction between IL-2 common gamma chain (cγc) and NIK. The present invention also relates to the use of NIK or a mutein, variant, fusion protein, functional derivative, circularly permutated derivative or fragment thereof, in the manufacture of a medicament for the treatment of a disease, wherein a cytokine stimulating signalling trough the IL-2 cγc is involved in the pathogenesis of

the disease.
RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2003:837291 CAPLUS
DN 139:328743
TI Modulating interaction of IL-2 with NIK by derivatives of the IL-2 common gamma chain, and therapeutic uses thereof
IN Wallach, David; Ramakrishnan, Parameswaran; Shmushkovich, Taisia
PA Yeda Research and Development Co. Ltd., Israel
SO PCT Int. Appl., 103 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2003087374	A1	20031023	WO 2003-IL316	20030415
WO 2003087374	A9	20050127		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2482718	A1	20031023	CA 2003-2482718	20030415
AU 2003222415	A1	20031027	AU 2003-222415	20030415
EP 1499724	A1	20050126	EP 2003-717504	20030415
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,				

IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
JP 2005525113 T 20050825 JP 2003-584315 20030415
US 2005287144 A1 20051229 US 2005-511722 20050622
PRAI IL 2002-149217 A 20020418
IL 2002-152183 A 20021008
WO 2003-IL316 W 20030415
AB This invention relates to the use of IL-2 common gamma chain (cγc) and related mols. for the modulation of signal activities controlled by cytokines, and therapeutic uses thereof. Specifically, the invention relates to the use of IL-2 cγc or a mutein, variant, fusion protein, the intracellular domain of cγc (ICDcγc), 1-357, 1-341 functional derivative, circularly permutated derivative or fragment thereof for modulating the interaction between cγc and NIK. In addition the invention relates to the use of a DNA encoding cγc or derivs., a DNA encoding the antisense of cγc, an antibody specific to cγc, or a small mol. obtainable by screening products of combinatory chemical in a luciferase system, for modulating the interaction between IL-2 common gamma chain (cγc) and NIK. In another aspect, the invention provides the use of cγc or derivs. in the manufacture of a medicament for treatment of a disease, wherein NIK activity is involved in the pathogenesis of the disease.
RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 4 OF 4 MEDLINE on STN DUPLICATE 2
AN 2002385095 MEDLINE
DN PubMed ID: 12133934
TI Essential role of NF-kappa B-inducing kinase in T cell activation through the TCR/CD3 pathway.
AU Matsumoto Mitsuru; Yamada Takuji; Yoshinaga Steven K; Boone Tom; Horan Tom; Fujita Shigeru; Li Yi; Mitani Tasuku
CS Division of Molecular Immunology, Institute for Enzyme Research, University of Tokushima, Tokushima, Japan.. mitsuru@ier.tokushima-u.ac.jp
SO Journal of immunology (Baltimore, Md. : 1950), (2002 Aug 1) Vol. 169, No. 3, pp. 1151-8.
Journal code: 2985117R. ISSN: 0022-1767.

CY United States
DT Journal; Article; (JOURNAL ARTICLE)
(RESEARCH SUPPORT, NON-U.S. GOV'T)
LA English
FS Abridged Index Medicus Journals; Priority Journals
EM 200208
ED Entered STN: 23 Jul 2002
Last Updated on STN: 30 Aug 2002
Entered Medline: 13 Aug 2002
AB NF-kappa B-inducing kinase (NIK) is involved in lymphoid organogenesis in mice through lymphotoxin-beta receptor signaling. To clarify the roles of NIK in T cell activation through TCR/CD3 and costimulation pathways, we have studied the function of T cells from aly mice, a strain with mutant NIK. NIK mutant T cells showed impaired proliferation and IL-2 production in response to anti-CD3 stimulation, and these effects were caused by impaired NF-kappa B activity in both mature and immature T cells; the impaired NF-kappa B activity in mature T cells was also associated with the failure of maintenance of activated NF-kappa B. In contrast, responses to costimulatory signals were largely retained in aly mice, suggesting that NIK is not uniquely coupled to the costimulatory pathways. When NIK mutant T cells were stimulated in the presence of a protein kinase C (PKC) inhibitor, proliferative responses were abrogated more severely than in control mice, suggesting that both NIK and PKC control T cell activation in a cooperative manner. We also demonstrated that NIK and PKC are involved in distinct NF-kappa B activation pathways downstream of TCR/CD3. These results suggest critical roles for NIK in setting the threshold for T cell activation, and partly account for the immunodeficiency in aly mice.